

FIG. 1

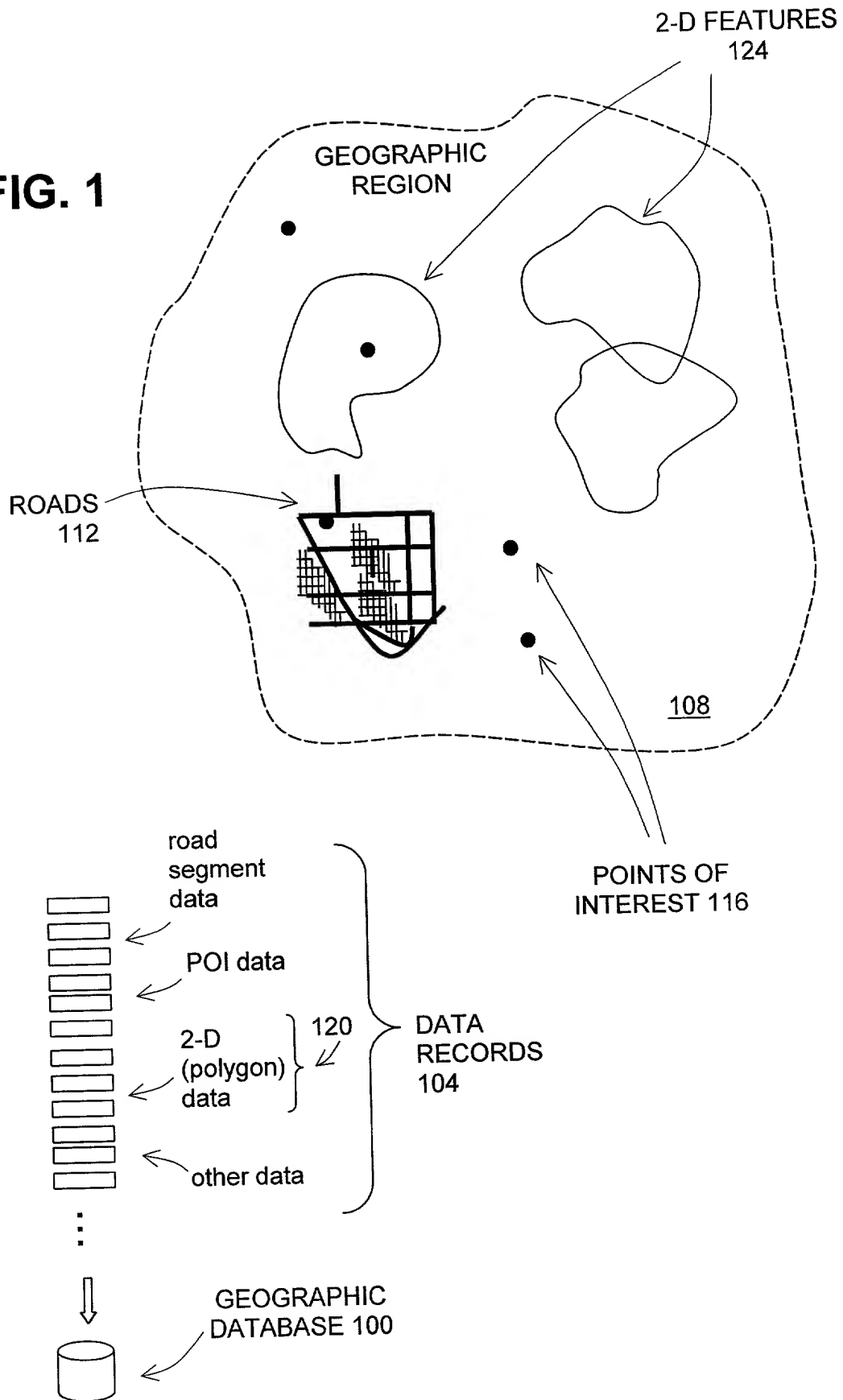


FIG. 1

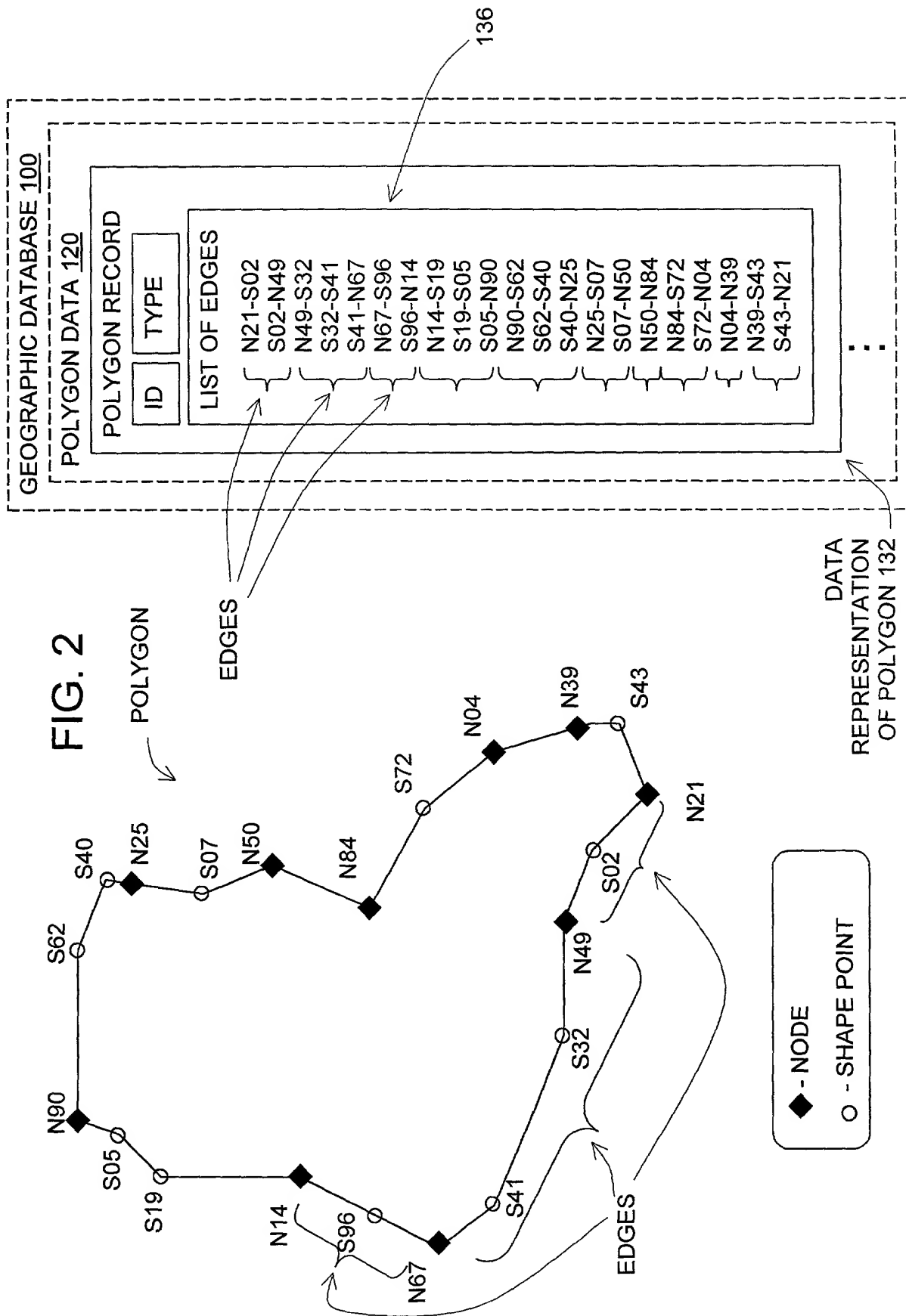


FIG. 3

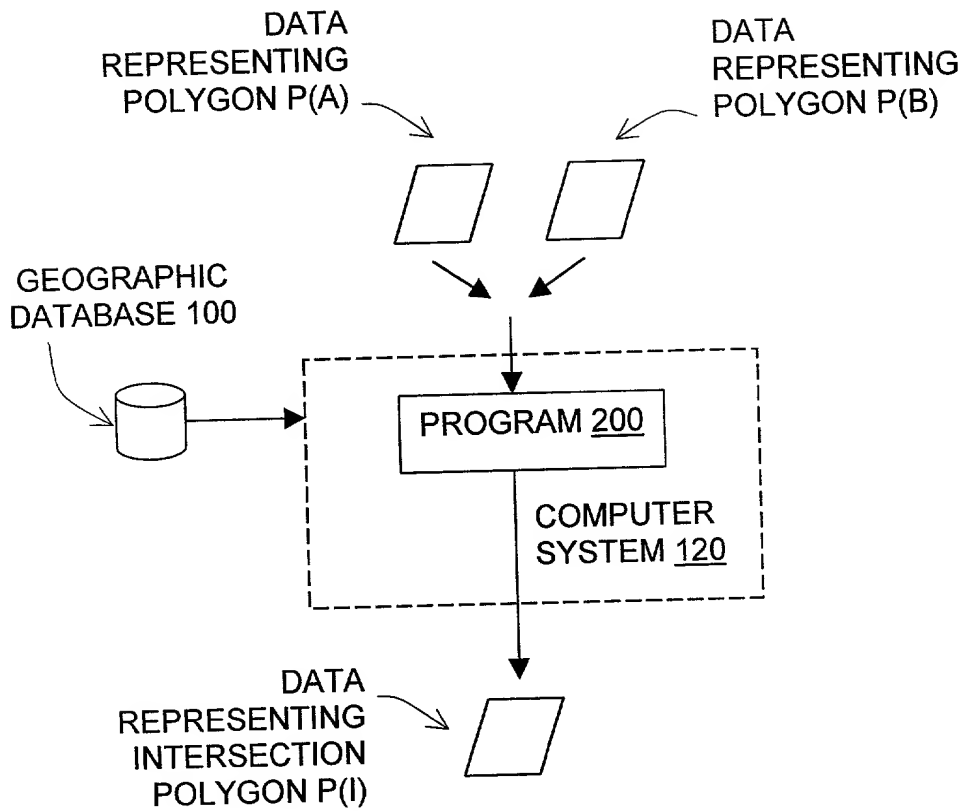


FIG. 3

FIG. 4

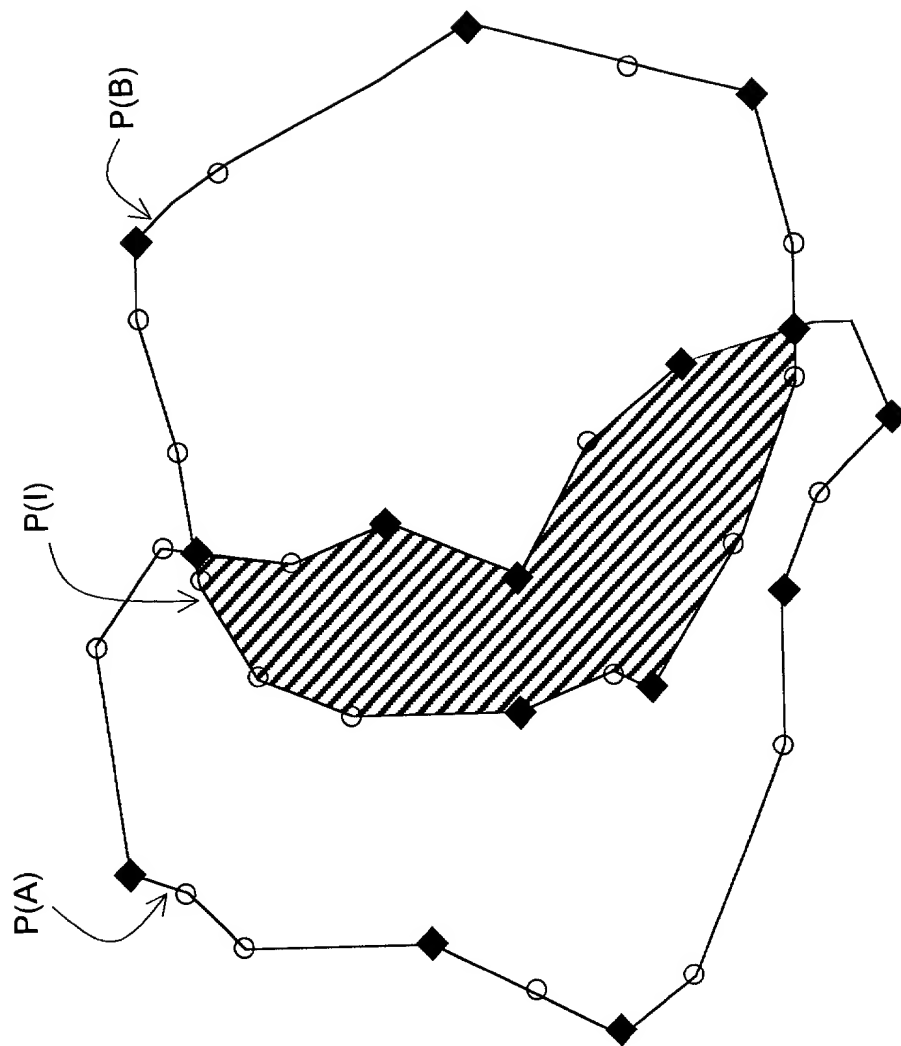
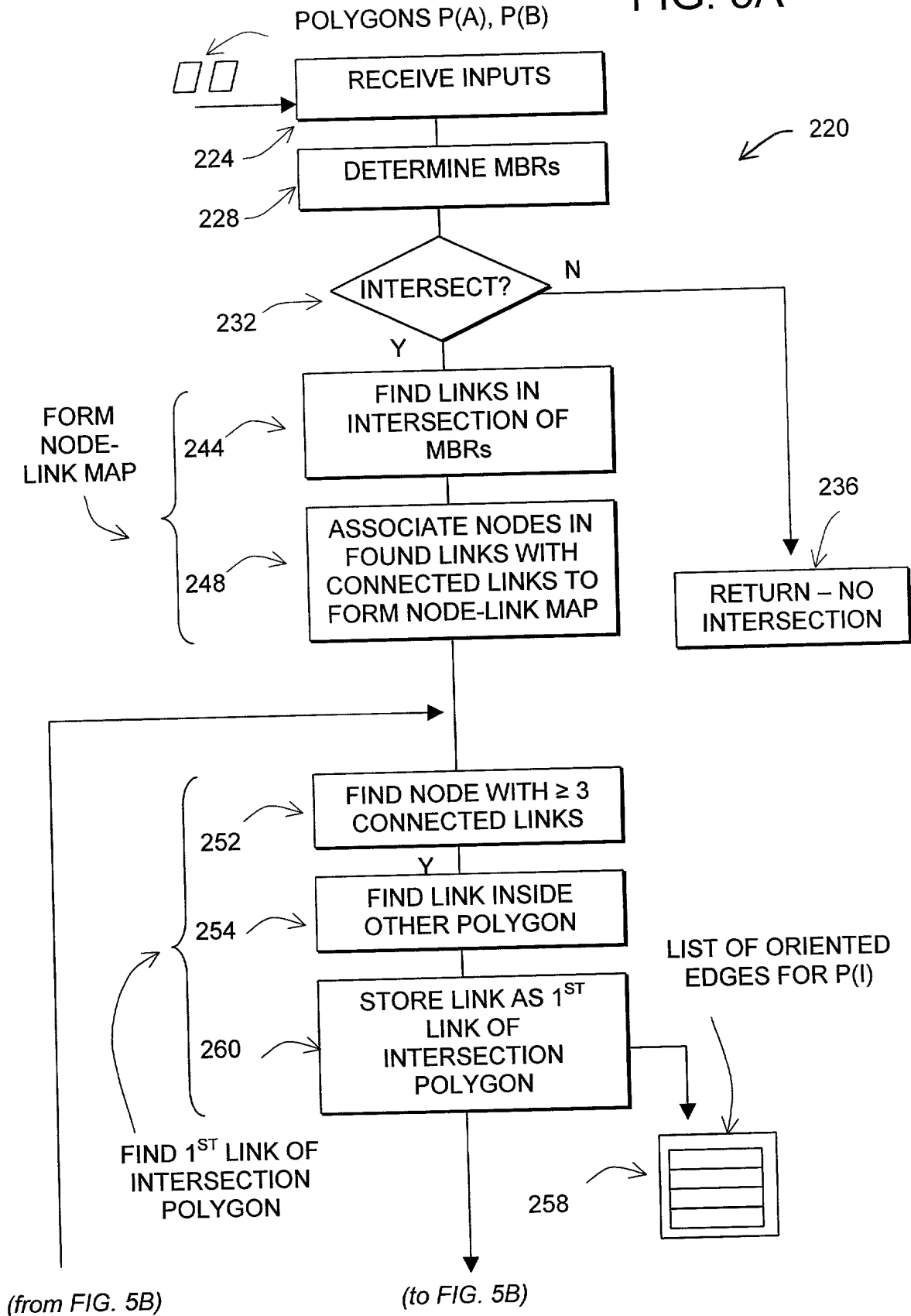


FIG. 5A



(from FIG. 5A)

FIG. 5B

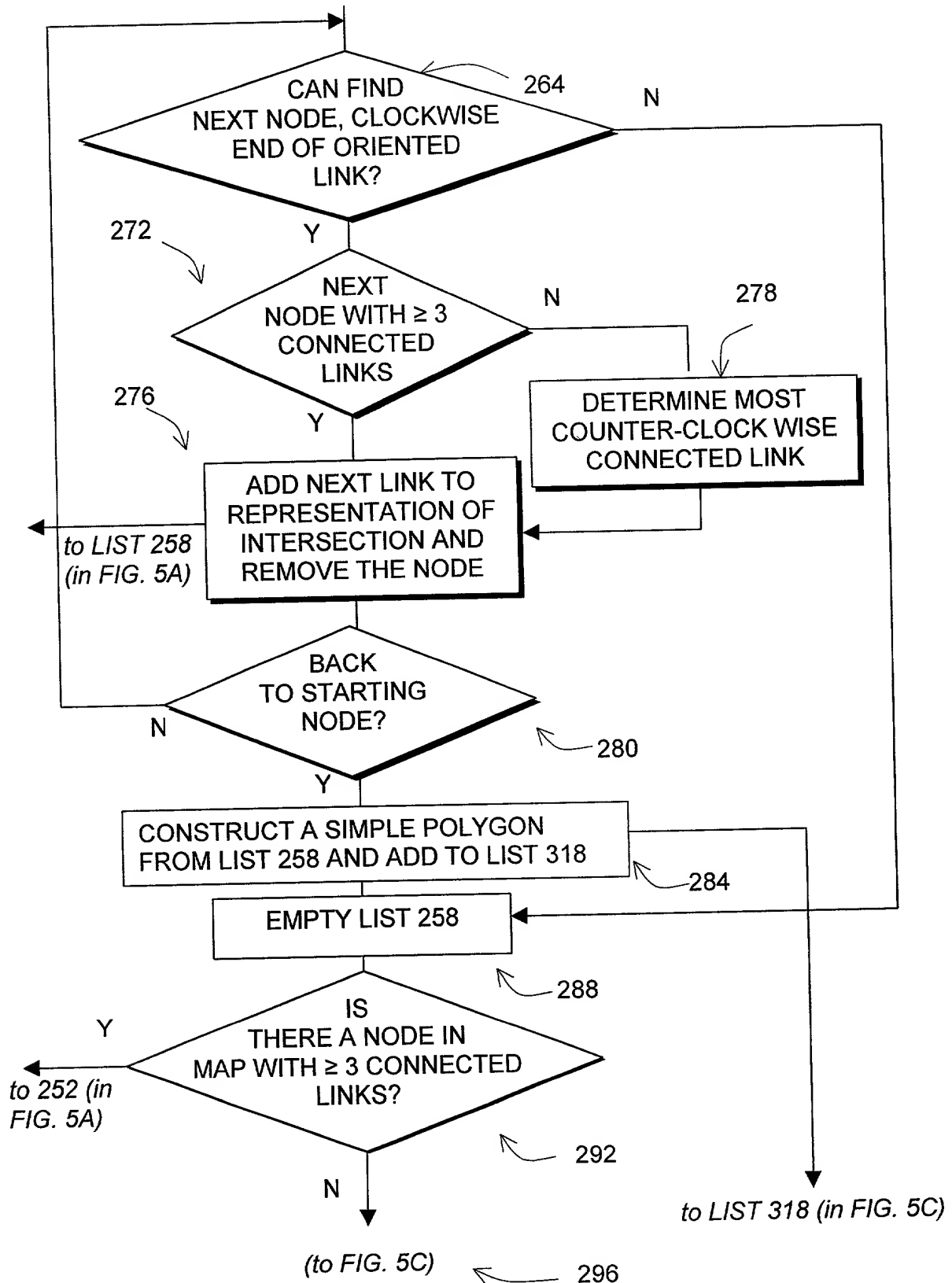


FIG. 5C

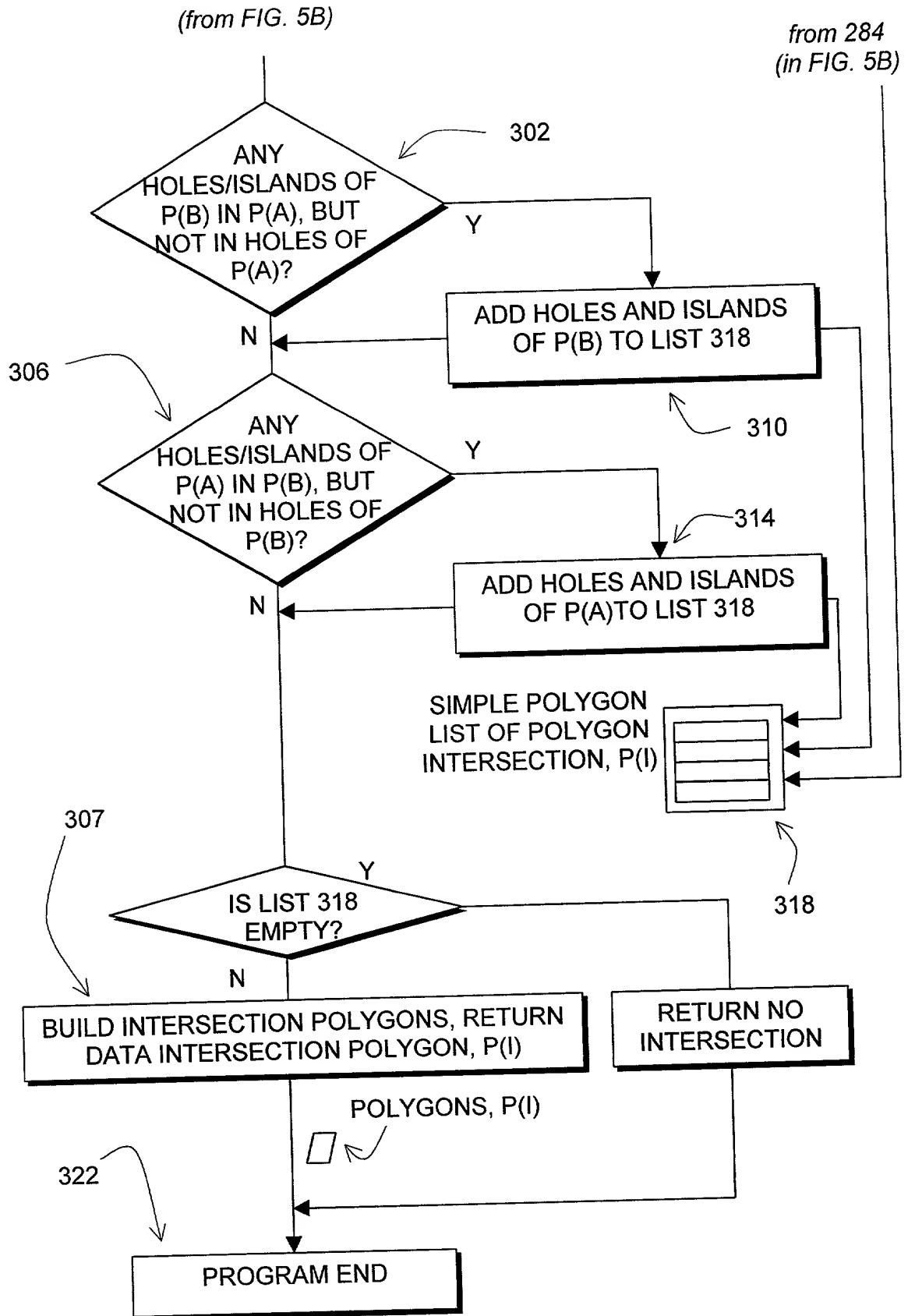
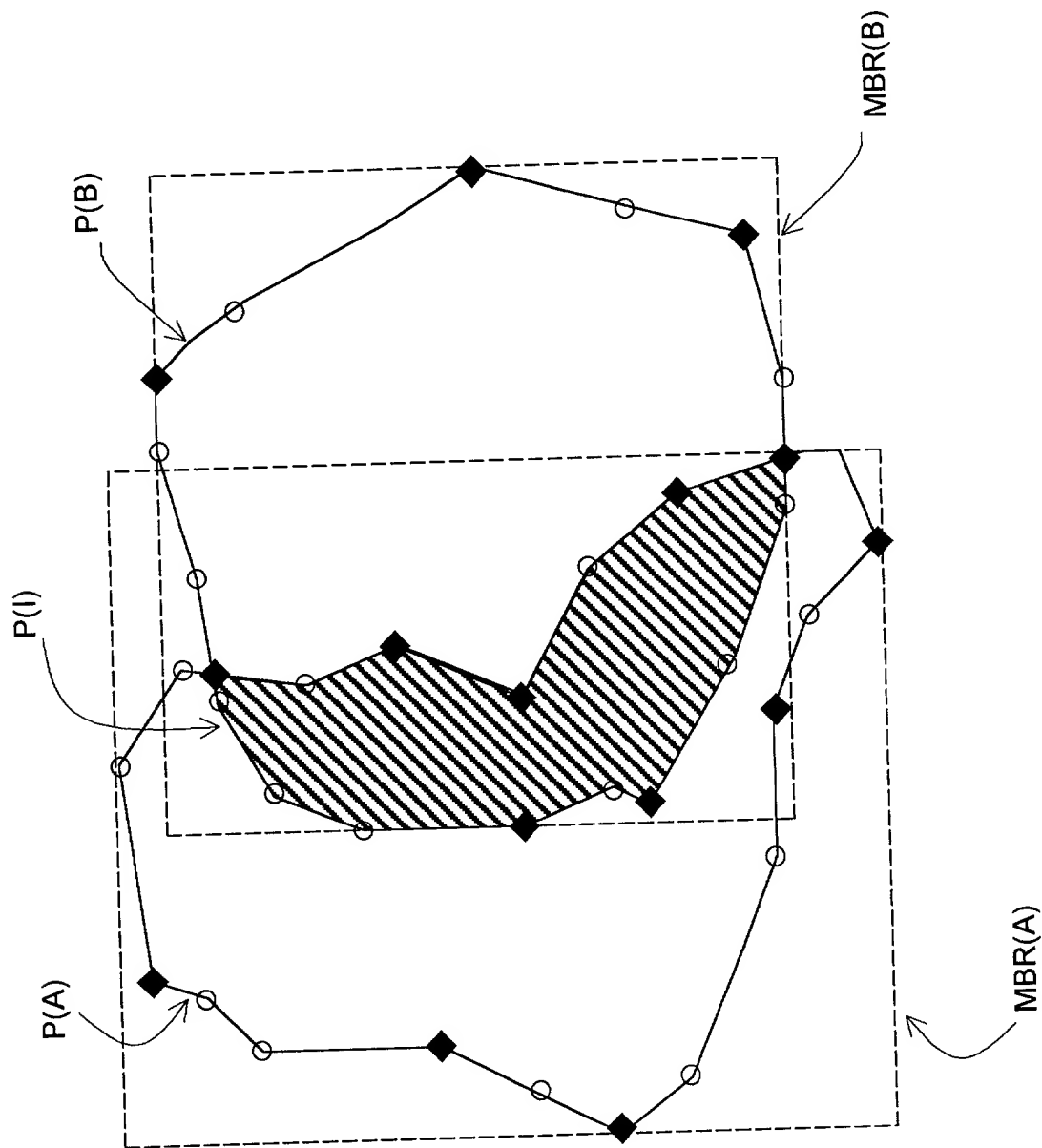


FIG. 6



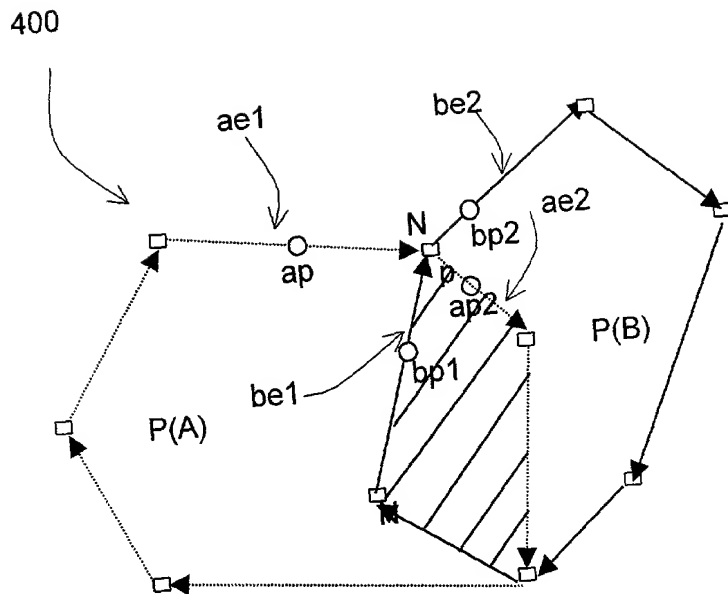


FIG. 7A

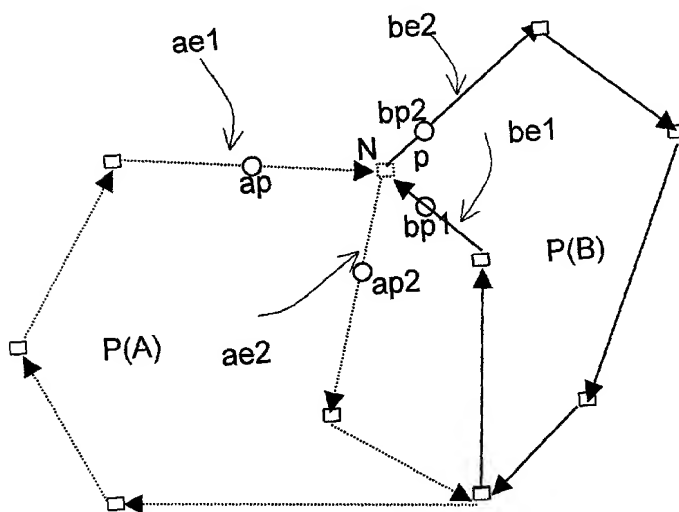
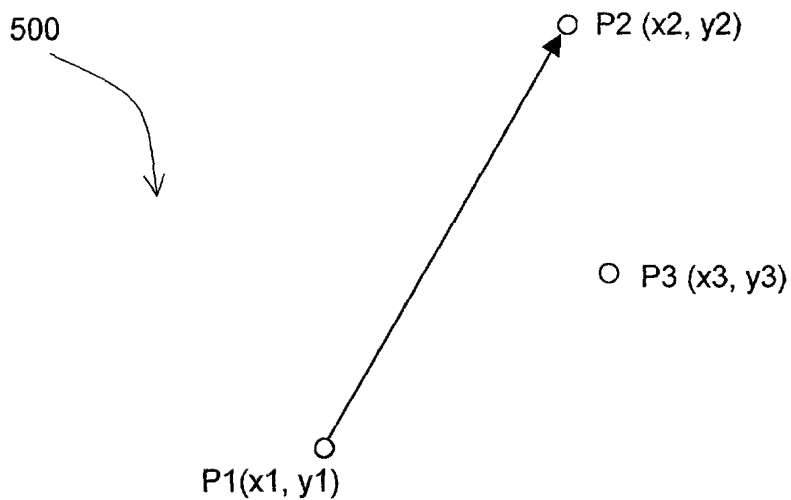


FIG. 7B

FIG. 7A

FIG. 8

(Test if a point on, on left,
or on right side of a line segment)



To test position of P3 relative to line segment P1P2, let

$$c = (x1 - x3) * (y2 - y3) - (x2 - x3) * (y1 - y3)$$

If $c = 0$, P3 is on line segment P1P2;

If $c > 0$, P3 is on right side of line segment P1P2;

If $c < 0$, P3 is on left side of line segment P1P2;

FIG. 10

